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- A block diagram of a system architecture. A large rectangle labeled 10 contains several components. At the top is a horizontal bar labeled 18. Below it, on the left, is a box labeled 20. To the right of box 20 is a box labeled 22. To the right of box 22 is a stack of three boxes labeled 24, 26, and 28 from top to bottom. Below the stack is a box labeled 30. A dashed line connects box 22 to box 30. Another dashed line connects box 20 to box 30. A dashed line also connects box 24 to box 30. A solid line labeled 34 points to box 30. A solid line labeled 32 points to the stack of boxes 24, 26, and 28. A solid line labeled 36 points to the right side of the large rectangle 10.

(57) Abstract: A device (10) for protecting data, comprising a first interface (18) for connection to a computing device, a second interface for connection to a data storage (20), an encryptor (22) located in-line between the first interface (18) and the second interface, a control system (30), and a memory (24). The memory (24) includes program data (26) executable on the computing device to perform user authentication, the control system (30) is configured to initially expose the memory (24) to the interface to facilitate user authentication and to expose the encryptor (22) to the interface only upon successful user authentication, and the encryptor (22) is operable to encrypt on the fly data received from the first interface (18) and to forward the data once encrypted to the second interface and to decrypt on the fly data received from the second interface and to forward the data once decrypted to the first interface (18).



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